

WHAT IS CLAIMED IS:

1. A cylinder head of an internal combustion engine, comprising:

5 a structure cast in metal, the structure defining therein an intake port and having a side wall surface from which an upstream end of the intake port is exposed to the outside; and
a partition plate of metal installed in the intake port to divide the same into two parallel intake conduits, the partition plate having lateral edges which are embedded in an inner wall of
10 the intake port,

wherein the partition plate has an upstream edge which includes a major straight portion and two projected end portions which are provided on both ends of the major straight portion respectively, and

15 wherein the major straight portion is positioned inside relative to the side wall surface and the two projected end portions have upstream edges which are embedded in the inner wall of the intake port and machined to be flush with the side wall surface.

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2. A cylinder head as claimed in Claim 1, in which the upstream edges of the two projected end portions are provided by cutting parts of the two projected end portions which are projected outward from the side wall surface.

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3. A cylinder head as claimed in Claim 1, in which the two projected end portions have portions chamfered or rounded.

4. A cylinder head as claimed in Claim 1, in which the partition
30 plate is set in the intake port through a casting-in technique using the partition plate as an insert.

5. A cylinder head as claimed in Claim 1, in which the partition plate has a thickness ranging from approximately 1 mm to approximately 2 mm.
- 5 6. A cylinder head as claimed in Claim 1, in which the partition plate is constructed of a duralumin, a stainless steel or an aluminum alloy.
- 10 7. A cylinder head as claimed in Claim 1, in which the lateral edges of the partition plate are bent relative to a major portion of the partition plate.
- 15 8. A cylinder head as claimed in Claim 1, in which the partition plate has a curved or bent portion which is so oriented that a longitudinal axis thereof extends along an axis of the intake port.
- 20 9. A method of producing a cast cylinder head of an internal combustion engine, the cylinder head having an intake port and a side wall surface from which an upstream end of the intake port is exposed to the outside, the method comprising:
- (a) preparing a sand core for shaping the intake port, the sand core having a partition plate set therein, the partition plate including a major portion wholly embedded in the sand core, lateral edges projected from lateral edges of the core sand, a downstream edge and an upstream edge, the upstream edge including a major straight portion and two projected end portions which are provided at both ends of the major straight portion;
- 25 (b) setting the sand core in a sand mold in such a manner that the major straight portion is positioned inside of the side wall surface of a cylinder head to be produced and the two projected end portions are projected outward from the side wall surface of the cylinder head to be produced;
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(c) positioning the sand core relative to a core print possessed by the sand mold;

(d) pouring a molten metal into the sand core and removing a produced cylinder head from the sand mold after
5 solidification of the molten metal; and

(e) trimming the two projected end portions of the partition plate in the produced cylinder head in order that upstream edges of the two projected end portions are flush with the side wall surface of the produced cylinder head.

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10. A method as claimed in Claim 9, in which the lateral edges of the partition plate at the step (a) are bent relative to the major portion.

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11. A method as claimed in Claim 9, in which the two projected end portions of the partition plate at the step (a) have portions chamfered or rounded.

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12. A method as claimed in Claim 9, in which the partition plate at the step (a) has at least a curved or bent portion which is so oriented that a longitudinal axis thereof extends along a longitudinal axis of the partition plate.